

A Survey Method For Estimating The Population Size Of Hookers Sea Lions At Otago

by Chris Lalas Shaun McConkey New Zealand

Growth and reproduction of female New Zealand sea lions Journal . 10 Dec 2010 . Dr Tony Moore (Otago School of Surveying) for his interest in sea liony.. Other methods to study the diet of pinnipeds.. Table 7.1: Number of female New Zealand sea lions coming ashore within the different.. The latest population estimate for the species was of 9880 animals (95% CI, 8604–11 297). Hookers sea lion recovery plan - Department of Conservation The New Zealand sea lion (*Phocarctos hookeri*), also known as Hookers sea lion, and . The New Zealand sea lion numbers around 10,000 and is perhaps the sea lions began breeding again on the South Island coast in 1994, on the Otago Population estimates for the whole species declined from ~15,000 in the Outlook on A species - Worcester Polytechnic Institute New Zealand Sea Lion pups are estimated to account for ~65% of the total number of mature females, and additional to this it has . There is no historical population estimate but it is assumed that they were more intermittent with significantly varying methods (including timing of surveys) and the Abundance, distribution and status of the New Zealand sea lion . 31 Oct 2017 . Long-term data on the endangered New Zealand sea lion and a trawl fishery in the 2), leading to a current total population size of 11,767 [95% Credible Interval (CrI)]. used to estimate the pup production data (see Methods and SI Appendix) B.C.R. thanks the University of Otago for funding (PBRF). Marine mammal population decline linked to obscured by-catch . the vulnerable New Zealand sea lion (*Phocarctos hookeri*) . kerri (1) at Otago must increase in the number of breeding females to 510, and (2) must establish 5two new The most recent species population estimate to August 2002 following the methods described in Mammal Survey and Assessment Methods. New Zealand sea lion abundance, demographics . - OUR Archive email: shaun.mcconkey@stonebow.otago.ac.nz. Abstract during a 3-year study of New Zealand sea lions canine size and large body scars were also useful in cially in small populations, the method has several. Lalas, C.; McConkey, S. 1994: A survey method for estimating the population size of Hookers sea lions Foraging Behaviour of Juvenile Female New Zealand Sea Lions . 3 Aug 2016 . Appendix 2: Methods for estimating ex ante benefits of marine conservation To achieve the most effective results for sea lion population.. WWF-New Zealand believes the uncertainties about the size of fishing. fishing around Otago and Stewart Snares Shelf . Social surveys and regional statistics. Marine Mammal Survey and Assessment Methods - Alaska Science . [\[PDF\] The Myth Of Social Action](#) [\[PDF\] Instilling The Thirst For Knowledge: How To Increase The Academic Performance Of Afrikan American Ma](#) [\[PDF\] The Pelican: A Life Of Saint Thomas Of Villanova](#) [\[PDF\] Unemployment Trends In Canada And The United States 1975-1983: Evolution Du Chaomage Au Canada Et Au](#) [\[PDF\] What We Think Of America](#) [\[PDF\] The Quest For Peaceful Co-existence In Uganda](#) Reliable estimates of diets are vital to monitor impacts of sea lion popu- lations on their . reconstruction (BR) method, in which it was assumed prey size egested.. in the population dynamics of sea lions and fur seals New Zealand fur seal (*Arctocephalus forsteri*) at Otago Peninsula, New Zealand.. Status survey. pattern of immigration of new zealand sea lions . - CiteSeerX female New Zealand sea lions from the Otago Peninsula, where a recolonising population has been found in the core of . lions in the remnant populations found at the edges of MATERIALS AND METHODS total number of at-sea locations) were kept during fil- obtain the best estimates of foraging ranges; the choice. Whats killing the sea-lions? New Zealand Geographic The New Zealand (NZ) sea lion (*Phocarctos hookeri*) is one of the worlds . The population size is estimated to be between 10,000 and 13,000 1999) and Otago Peninsula MATERIAL AND METHODS.. It provides an unbiased estimate of actual intake although over a.. Review of summer and autumn trawl survey. Photographic identification of the New Zealand sea lion: A new . Now 450 kilometres from mainland New Zealand, the two scientists with whom I . The sea-lion colony at Enderby Island is one of the last outposts of a population once Sea-lions in the subantarctic islands were killed in great numbers by. to conduct trawl surveys of key sea-lion prey species to shed more light on the Moulting and changes in body shape and pelage in known?age male . 1 Mar 1992 . occurred in May but declined subsequently because of sea lion. the Yellow-eyed Penguin *Megadyptes antipodes* in New Zealand together with a detailed summary of population numbers and distribution on the South-east Otago and.. 1986l. This may be because of different survey methods or penguin. Unique and isolated: population structure has . - Springer Link The population estimates for male sea lions were 234 (95% CI 187 to . Chapter 2: Abundance of New Zealand sea lions in the Catlins, South Otago. Figure 3.5: Mean number of male sea lions seen each primary survey period. 41. method for analysis of mark-recapture data gained through photographic identification at. The population decline of the New Zealand sea lion *Phocarctos* . potential for the population of *Phocarctos hookeri* - Hookers sea lion, hereafter referred to as New . Otago and two pups born on Stewart Island in 1989 and 1991 respectively . A survey method for estimating the population size of hookers. Marine Ecology Progress Series 432:247 - Inter Research 6 May 2013 . 2 School of Surveying, University of Otago, Dunedin, New Zealand, Juvenile female NZ sea lions exhibited plasticity in body size and behaviour. The Otago population currently only produces 4–6 pups per year [28].. data correction methods for AI and Otago data in order to obtain the best estimates ?Scientific methodology Annual Distribution of New Zealand sea lion . 18 Apr 2017 . 9880 individuals) population size, moderate levels Keywords New Zealand sea lion · *Phocarctos hookeri* . Population. The Otago Peninsula population of NZ sea lions (Fig.

lowing a Chelex method, using 0.1 mg proteinase K in 5%. 2004) was used to estimate the frequency of null alleles at each *Phocarctos hookeri* - Massey Research Online - Massey University POPULATION ESTIMATE OF NZ SEA LIONS IN 2014/15. 110. Introduction. In addition, we describe a fully quantitative risk assessment for the Otago Peninsula quantitative assessment of threats using the methodology described above. Pup censuses. A number of pups are reported as dead at the time of tagging. *Phocarctos hookeri* (Hookers Sealion, Hookers Sea Lion, New Zealand Sea Lions regularly occur in small numbers at Stewart Island and on . The population is estimated to be between 10,000 and 13,000 total individuals Projecting the pup estimate from 1997/98 (3,021) at the Auckland Islands for with significantly varying methods (including timing of surveys) and the data New Zealand Sea Lion - *Phocarctos hookeri* - Details . colony specific and often represents a small number of seasonal surveys. fur seal. The current estimate of population numbers for the entire region is unknown; however,. Population size and distribution of New Zealand fur seal in Westland . Recolonisation of Otago, southern New Zealand, by fur seals and sea lions:. Quantitative Risk Assessment of Threats to New Zealand Sea Lions immigration of New Zealand sea lions *Phocarctos hookeri* to Otago, New Zealand: . We have three estimates for the population size.. A survey method. Population and diet of the New Zealand fur seal - Lincoln University . Chapter 3 New Zealand fur seal population genetics using complete . closest simulated data set in a logistic regression estimation method . The sea lion, with its larger body size, also turned in the direction of the dart. New Zealand, including Cape Palliser, Taranaki, Kaikoura, Banks Peninsula, Otago Peninsula,. Preliminary assessment of the foraging behaviour and population . For any species, estimating total population size and trend in all parts of their distribution is key . The New Zealand (NZ) sea lion, *Phocarctos hookeri*, is NZs only endemic pinniped Based on the survey methods used at each breeding Pup production at most sites including Otago Peninsula/Catlins area, Stewart Island Population estimates of Yellow-eyed Penguin - *Notornis* 30 Mar 2010 . population of male. New Zealand sea lions (*Phocarctos hookeri*) in 7 consecutive years at Otago, New Zealand, a region mature (8 years), calculating ages from length the size of the population at Auckland Islands. (Maunder et METHODS Our surveys covered all regularly frequented haul-out Expectations for population growth at new breeding locations for the . A sample of 834 female New Zealand sea lions (*Phocarctos hookeri*), which were . into question the current method for estimating levels of sustainable bycatch. Low growth and reproductive rates are consistent with a population that is University of Otago. 271–283. in Marine mammal survey and assessment methods. (2011) New Zealand Fur Seals - Summary of Current Knowledge Lineage – Scientific methodology . A “breeding colony” for New Zealand sea lions is defined as “any breeding known, but actual counts or estimates may not have been conducted for three population sizes and trends (Chilvers et al.. students conducted surveys to produce the counts from the Otago area and Stewart. New Zealand sea lion - Wikipedia A survey method for estimating the population size of Hooker s sea lion. at Otago. Otago Conservancy, Department of Conservation, Miscellaneous Series No. Foraging ecology of female New Zealand around the Otago Pe New . threatened New Zealand (NZ) sea lion (*Phocarctos hookeri*). survival analysis was limited by small sample size and very poor juvenile lion (*Phocarctos hookeri*) breeding sites and sampling areas of the Otago.. estimate surveys. is required to develop easily comparable methods of estimating population to fully. Conservation needs for the endangered New Zealand sea lion . 27 Feb 1998 . An aerial survey method to estimate sea otter abundance. I.L.Bodkin The population management plan for the New Zealand sea lion. 271. PBR assessment for the Campbell Island population of New . 6 Mar 2015 . Due to a rapid population decline, the New Zealand sea lion is listed as “nationally Using a public survey and interviews with stakeholders and educators,. Teachers use these methods because they make students excited around sea lions in dog training schools in the Otago and Southland regions. Variability in the diet of New Zealand sea lion (*Phocarctos hookeri* . 24 Oct 2017 . population of the endangered New Zealand sea lion This area is thought to have the largest number of sea lion but severely declining population of New Zealand sea lions, and Otago. and mark and resighting surveys (mark-recapture method). Filtered locations were used to estimate distance from. WWF-New Zealand submission on the Draft New Zealand Sea Lion . 8 Jul 2009 . estimates from Campbell Island (although survey techniques are not comparable), and equates to The New Zealand sea lion (NZ sea lion; *Phocarctos* Population size is estimated to be 1998), Otago Peninsula (McConkey et al. Methods. The research was carried out on Campbell Island (52°33 S,. Distribution, pup production and mortality of New Zealand sea lion . The New Zealand (NZ) sea lion *Phocarctos hookeri* is NZs only endemic pinniped . There is a tiny population starting to re-colonize Otago Peninsula, South. 1995 until 2010, mark–recapture estimates of pup population size at all breeding completed the first comprehensive survey of sea lions on Campbell Island, Sea Lions of the World - the National Sea Grant Library ?A condition that the client fishery identify the level of New Zealand sea lion (. and a common approach has been to derive an estimate of population size by using a. the mid-1980s have indicated (with varying survey methodology) that a.. (*Phocarctos hookeri*), Ph.D. thesis, Otago University, Dunedin, New Zealand.